

REMARKS

Claims 1-7 were previously pending in this application. Claims 1-4 have been amended, claims 5-7 have been canceled without prejudice to or disclaimer of the underlying subject matter, and new claims 8-12 have been added. Support for the new and amended claims can be found throughout the specification, for example, at page 23, line 12 through page 24, line 12, in the sequence listing, and in the claims as originally filed. The specification has been amended at the request of the Examiner to remove hyperlinks and browser executable code and to correct typographical errors. No new matter enters by way of these amendments.

Sequence Listing and Information Disclosure Statement

Applicants note that the sequence listing filed October 31, 2000 has been entered and thank the Examiner for this information. Office Action page 3. Applicants also acknowledge and thank the Examiner for including an initialed copy of the Information Disclosure Statement (Form PTO-1449), filed on September 17, 2001, with this action.

Restriction/Election

Applicants note that the Response to Restriction Requirement filed May 2, 2003 has been disregarded and that the Response to Restriction Requirement filed May 5, 2003 has been considered. Office Action page 3. Further, Applicants acknowledge the finality of the restriction and election requirements but maintain their traversal to each. To facilitate prosecution, however, Applicants have removed the non-elected claims from the application.

Specification – Browser Executable Code

The specification has been objected to because it allegedly contains embedded hyperlinks and/or other form of browser executable code. Office Action page 3. According to M.P.E.P. §608.01, embedded hyperlinks and browser executable code are not permitted. The specification has been amended to remove the phrase “http://.” No new matter has been added by these amendments. Applicants request that the objection to the specification be withdrawn.

Specification – Trademarks

The Examiner has requested that trademarks be capitalized and accompanied by the generic terminology. Office Action page 4. Applicants have amended the specification to designate trademarks as such to comply with the Examiner’s request.

Specification – Title

The Office alleged that the title is not descriptive and argued that a new title is required that is clearly indicative of the invention to which the claims are directed. Office Action at page 3. Applicants respectfully disagree. The present title, “Plant Genome Sequence and Uses Thereof,” is indeed descriptive. After all, a plant genome sequence is described throughout the specification, including in the examples, where a plant genome sequence and uses thereof are described in detail. Moreover, Applicants respectfully submit that an inventor is free to act as his own lexicographer as long as he does not give any term a meaning that is repugnant to the art. *See In re Hill*, 161 F.2d 367, 73 U.S.P.Q. 482 (C.C.P.A. 1947). Accordingly, based on the foregoing, Applicants respectfully request that the Examiner withdraw the objection to

Applicants' title.

II. Claim Rejections – 35 U.S.C. § 101

Claims 1-4 have been rejected under 35 U.S.C. § 101 because the claimed invention is allegedly not supported by either a specific, substantial and credible asserted utility or a well established utility. Office Action page 5. Applicants respectfully disagree.

The Examiner acknowledges that the specification describes multiple utilities for the present invention, including “genomic mapping, gene identification and analysis, plant breeding, preparation of expression constructs, preparation of transgenic plants, screening for traits, and determination of polymorphisms and of associations between polymorphisms and traits...” Office Action page 5. Moreover, other utilities are set forth in the specification. *See* page 48 *et seq.* under “Exemplary Uses of the Agents of the Invention.” However, the Examiner contends that none of these utilities constitute a “substantial” or “specific” utility. Applicants respectfully disagree with this assertion.

It is well established that “when a properly claimed invention meets at least one stated objective, utility under section 101 is clearly shown.” *Raytheon Co. v. Roper Corp.*, 724 F.2d 951, 958, 220 U.S.P.Q. 592, 298 (Fed. Cir. 1983). The present specification describes many objectives that are met by the present invention. In addition to the utilities described by the Examiner (quoted above), the claimed nucleic acid molecules are useful for obtaining protein molecules, determining the presence and/or identity of polymorphisms, measuring the levels of an mRNA in a sample, determining the location of a corresponding DNA sequence on a physical or genetic map, probing for other molecules, generating primers, obtaining other nucleic acid

molecules from the same species, obtaining related protein coding sequences, obtaining promoters and other flanking genetic elements, screening cDNA genomic libraries, obtaining nucleic acid homologs, detecting and characterizing gene expression, etc. *See* specification at page 48 *et seq.* under “Exemplary Uses of the Agents of the Invention.”

Many of these uses are directly analogous to a microscope. An important utility of a microscope resides in its use to identify and characterize the structure of biological tissues in a sample, cell, or organism. Significantly, the utility of the microscope under 35 U.S.C. § 101 is not compromised by its use as a tool in this manner. Many of the presently disclosed utilities are directly analogous to the utilities of a microscope, *i.e.*, the claimed nucleic acid molecules may be used to identify and characterize other nucleic acid molecules within a sample, cell or organism. Such utility is indistinguishable from the legally sufficient utility of a microscope. Thus, the presently disclosed sequences possess the requisite utility under 35 U.S.C. § 101.

In the Office Action, the Examiner provides no evidence challenging the disclosed utilities for the presently claimed nucleic acid molecules. Rather the Examiner attempts to undermine the existing utilities by stating that they are “general utilities and methods of further research that are applicable to virtually any genomic nucleic acid from any plant.” Office Action, at page 5. In short, the Examiner suggests that the asserted utilities are legally insufficient simply because other molecules can be used for the same purpose. This position is wrong as a matter of law – there is no requirement of exclusive utility in the patent law. *See Carl Zeiss Stiftung v. Renishaw PLC*, 945 F.2d 1173, 1180, 20 U.S.P.Q.2d 1094, 1100 (Fed. Cir. 1991) (“An invention need not be the best or the only way to accomplish a certain result...”).

For example, such an argument implies that a new golf club has no legal utility because

other golf clubs can be used for the same purpose, *i.e.*, hitting golf balls. Such a result is not only untenable, but requires reading “into the patent laws limitations and conditions which the legislature has not expressed,” a practice condemned by the Supreme Court. *See Diamond v. Chakrabarty*, 447 U.S. 303, 308, 306 U.S.P.Q. 193, 196 (1980), *quoting United States v. Dubilier Condenser Corp.*, 289 U.S. 178, 199, 17 U.S.P.Q. 154, 163 (1933). Thus, it must be the case that a utility, generic to a broad class of molecules, does not compromise the specific utility of an individual member of that class.

As noted above, the claimed nucleic acid molecules have many utilities. Some of these utilities may be common to a broader class of molecules. For instance, nucleic acid sequences may generally be used to identify and locate related sequences. However, when used in this manner, the result is not generic. Rather, the claimed nucleic acid molecules will identify a ***unique*** subset of related sequences. This subset of related sequences is specific to the claimed sequences and cannot be identified by any generic nucleic acid molecule. For example, a random nucleic acid molecule would not provide this specific utility. Referring again to the golf club analogy, the club is still generically hitting a golf ball, but is uniquely designed to hit a ball in a manner that is distinct from other clubs. Once again, Applicants assert that the claimed nucleic acid sequences exhibit the requisite utility under 35 U.S.C. § 101.

The Examiner notes that SEQ ID NO: 7212 is free of the prior art. Office Action page 6. In view of Applicants’ assertion that the claimed invention meets the requirements for a specific and substantial utility and the Examiner’s statement that SEQ ID NO: 7212 is free of the prior art, Applicants respectfully request that the Examiner withdraw the rejection under 35 U.S.C. § 101 and pass the application to issue.

III. Claim Rejections – 35 U.S.C. § 112, first paragraph, enablement

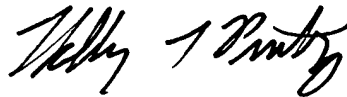
Claims 1-4 have been rejected under 35 U.S.C. 112, first paragraph, as allegedly lacking patentable utility due to allegedly not being supported by a specific, substantial, and credible utility or, in the alternative, a well-established utility. Office Action page 7. Applicants respectfully disagree, and note that this rejection has been overcome by the foregoing arguments regarding utility. Thus, the enablement rejection under 35 U.S.C. § 112, first paragraph, is improper. Reconsideration and withdrawal are respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is now in condition for allowance, and notice of such is respectfully requested.

The Examiner is encouraged to contact the undersigned should any additional information be necessary for allowance.

Respectfully submitted,



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